

**REMARKS****INTRODUCTION**

In accordance with the foregoing, claims 1 and 15 have been amended. No new matter is submitted and reconsideration of the allowability of the claims is respectfully requested.

Claims 1-39 are pending and under consideration.

**REJECTION UNDER 35 USC 101**

Claims 1 and 15-16 stand rejected under 35 USC 101 as directed to non-statutory subject matter. The rejection is respectfully traversed.

In particular, the Office Sets forth that claims 1 and 15 are not limited to tangible embodiments, "instead being defined as a memory including code or steps of execution. As such, the claim is not limited to statutory subject matter and is therefore non-statutory."

However, it is respectfully submitted that claims 1 and 15 have not been properly, or reasonably, interpreted. It would appear that the Office Action has attempted to interpret the claims as medium claims, e.g., a computer readable medium including a program or code to implement a particular series of claimed steps/operations. However, claims 1 and 15 are directed toward particular physical structure of a flash memory, claiming that the flash memory includes the first boot zone, the second boot zone, and the data zone. In addition, applicants have further amended claims 1 and 15 to clarify they the first boot zone or the second boot zone is selectable by a controller. Here, the claimed data zone program is executable and accessible based on selectable booting of the first or second booting programs when executed after execution of the first or second booting programs.

Thus, these claim features particularly define the physical structure requirements of the claimed flash memory.

Withdrawal of this rejection is respectfully requested.

**REQUEST FOR NEW NON-FINAL OFFICE ACTION**

It is respectfully submitted that the outstanding obviousness rejection fails to meet a prima facie obviousness standard. The Office Action has briefly summarized claimed features of dependent claims without addressing the particular claimed features of each claim. Applicants respectfully request a new non-final Office Action setting forth the Examiner's rejections rationale for all claims so applicants are fully apprised of the reasons and interpretation relied upon by the

Examiner in rejecting the claims. It is also respectfully submitted that such explanations are equally necessary as the Examiner would appear to have reversed previous indications of allowability of dependent features.

For example, in rejecting all different claims 2-8, 17-21, and 23, the Office Action states that these claims are summarily "directed to a memory protection apparatus to implement flash memory as set forth in claims 1, and 15. Therefore, it is rejected on the same basis as set forth hereinabove."

Rejections of claims 9-14, 22, and 24-29, and claims 30-39 have similarly been set forth by only summarizing all claims as either methods to implement a claimed memory or a storage system to implement a claimed flash memory.

Here, in less than 9 lines all claims other than claims 1 and 15 would appear to have been rejected merely based on their depending from a rejected base claim or merely because the Examiner believes that the proposed combination of references discloses the same, without addressing the remaining claims in any specificity.

As stated in MPEP 706.02(j) and 2142:

"To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations (Emphasis added).... It is important for an examiner to properly communicate the basis for a rejection so that the issues can be identified early and the applicant can be given fair opportunity to reply.

In addition, as noted in MPEP 2141.02, "[d]istilling an invention down to the "gist" or "thrust" of an invention disregards the requirement of analyzing the subject matter "as a whole."

Thus, by dismissing the claimed features of all claims other than claims 1, 15, and 16, the Office Action has not addressed a majority of the claimed features, i.e., all claim features have not been addressed. Further, by very briefly categorizing a large number of claims, the Office Action similarly improperly attempted to distill down the claimed invention.

Accordingly, if the outstanding rejection rationale is maintained, applicants respectfully request that a new non-final Office Action be issued particularly explaining the underlying rationale for rejecting all claimed features, including those features in the dependent claims.

## REJECTION UNDER 35 USC 103

Claims 1-39 stand rejected under 35 USC 103 as being obvious over Chaiken et al., U.S. Patent No. 6,757,838, in view of Abadi et al., U.S. Patent No. 5,268,962. This rejection is respectfully traversed.

The Office Action sets forth that it would have been obvious to incorporate features from Abadi et al. into Chaiken et al. to disclose the presently claimed memory related claims.

In particular, the Office Action sets forth that Chaiken et al. discloses a first boot zone, a second boot zone, and a data zone, but fails to "teach a method of commencing the first boot program based on error detection results...[and] fails to detail a method of beginning to use the boot program after it has been checked for errors."

To disclose these features, the Office Action relies upon Abadi et al., stating that Abadi et al. "teaches another method of checking data for errors before the data can be used by a computer...teaches a method of not commencing the data until it is checked for errors thus the system is not interrupted by erroneous data."

Thereafter, the Office Action concludes that it would have been obvious to modify Chaiken et al. to include the aforementioned missing features "because they both teach a method of checking for errors in data to be used by the computer system. Abadi covers the deficiency of Chaiken by teaching the detail of checking the data for errors before the data is commenced [used by the computer]"

However, it is respectfully submitted that the disclosure of Abadi et al. has been fundamentally misunderstood and the application of any teaching from Abadi et al. similarly misapplied to Chaiken et al.

As noted in the previous response,

Chaiken et al. sets forth a method of maintaining two stored BIOSs; one being modifiable (Main BIOS) and one being permanent (backup BIOS). **During** an initial booting of the backup BIOS, **after** a determination of how many retry attempts have been made of the Main BIOS, a validity of the Main BIOS is then performed. See FIG. 4 of Chaiken et al. However, **during** the initial booting of the backup BIOS, if the Main BIOS is found to not be valid, then the backup BIOS used to **finish** the booting operation. If the Main BIOS is found to be valid then the Main BIOS is then used to finish the booting operation.

Chaiken et al. emphasizes the differences between prior art systems, having only modifiable Flash memory storing a BIOS, and the invention of Chaiken et al. having the backup BIOS be recorded in either a permanent medium or with permanence on a similar medium.

The previous Office Action appeared to interpret the original claim language very broadly to permit an interpretation that either of the Main BIOS or the backup BIOS of Chaiken et al. was interpreted as reading on either of the first or second booting programs in the original independent claims. In addition, the Office Action further appeared to not give the claimed sequencing sufficient patentable weight, e.g., the sequencing between the determination of an error and the execution of a booting program.

Accordingly, to clarify the originally claimed invention and the inventor's original intent, applicants previously clarified the sequencing of the error determination and the executing of the booting programs, e.g., the claimed error determination is performed before execution of the booting program.

Conversely, Chaiken et al. implements a portion of the backup BIOS to perform the error determination of both the Main BIOS and the backup BIOS (See Chaiken et al. in col. 7, lines 10-24), while embodiments of the present invention at least discuss that the error determination is performed, e.g., by a controller, before each respective booting program is executed.

As noted above, the current Office Action is again utilizing Chaiken et al., and is now proposing to modify Chaiken et al. to set forth deficient features set forth in independent claims.

In particular, the Office Action has interpreted Abadi et al. as teaching to check data for errors before the data can be used by a computer and to not implement/commence data until it is checked for errors such that the system is not interrupted by erroneous data.

Here, the Office Action would appear to be interpreting the teachings of Abadi et al. very broadly and would not appear to be relying on any of the underlying reasoning for implementing any features of Abadi et al. or any of the underlying methods or systems for implementing the same. Rather, the Office Action is only using Abadi et al. to teach that it is good to check data for errors and not to implement/commence the data until it is checked for such errors.

This brief definition of the teaching of Abadi et al. would appear to be in error, as this is not the purpose or underlying benefit of Abadi et al. In addition, this broad benefit would appear to be merely a generality and appears vague, i.e., without relying on the disclosure, methods, or systems discussed in Abadi et al. the Office Action has failed to meet the prima facie obviousness requirement that there be a reasonable chance of success with the proposed combination.

Regardless, the primary purpose of Abadi et al. is to permit to computers to communicate through encrypted data. Data is encrypted before being sent from a first computer and then decrypted by the receiving computer. Based on the validity of the encryption key presented in the headers of the received data it can be determined whether there were errors or whether the received data has been tampered with.

Thus, Abadi et al. is not related to selective operations of booting programs in a memory, or even selective operations of any booting program. Similarly, Abadi et al. is not related to the pre-booting operation of a memory or disclose or suggest how to still perform a booting of a memory if there are errors in the booting program.

Rather, Abadi et al. is primarily focused on transmission of data between two computers. Such transmissions are performed both after any type of booting program has been performed and are unrelated to such booting programs.

Accordingly, Abadi et al. cannot be used to disclose the Office Action proposed "another method of checking data for errors before the data can be used by a computer...[and] method of not commencing the data until it is checked for errors thus the system is not interrupted by erroneous data," with regard to the BIOS memory of Chaiken et al.

The only teaching Abadi et al. could provide to Chaiken et al. would be to implement a similar encrypted data transferring operation in whatever eventual computer uses the BIOS memory of Chaiken et al.

In this regard, and similar to the above discussion that the proposed teachings of Abadi et al. being too vague, the Office Action's proposed modification of Chaiken et al. fails to set forth any support that the proposed modification of Chaiken et al. would accomplish the claimed features, i.e., there is no support that there is a reasonable chance of success that such a modified Chaiken et al. would achieve the claimed features.

Thus, it is respectfully submitted that it would not have been obvious to modify Chaiken et al. as proposed in the Office Action. In addition, it is further respectfully submitted Abadi et al. similarly fails to disclose the relied upon teaching proposed in the Office Action. Lastly, in view of the above, it is respectfully submitted that the Office Action has failed to meet a prima facie obvious standard.

Withdrawal of this rejection is respectfully requested.

CONCLUSION

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

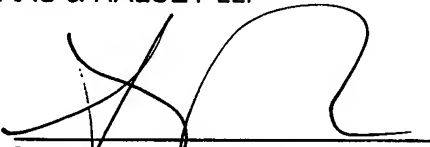
Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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